In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

Application.

Listing of Claims:

1. (Currently amended) A method of enabling a user to construct a target data storage system ~~to~~

the method comprising the steps of:

displaying a user interface to the user, the user interface connected ~~over a network~~ to

the target data storage system, the target data storage system comprising <u>front end controllers</u>

<u>coupled to a cache memory and a back end coupled to the cache, the back end comprising back</u>

<u>end controllers coupled and</u> a plurality of storage components, and one or more source data

storage systems, each of the one or more source data storage systems comprising <u>front end</u>

<u>controllers coupled to a cache memory and a back end coupled to the cache, the back end</u>

<u>comprising back end controllers coupled and</u> a plurality of storage components;

the user interface including a selector to enable the user to select one or more data storage

components from the one or more source data storage systems for inclusion in the target data

storage system;

merging the one or more data storage components from the one or more source data

storage systems into the target data storage system, including obtaining configuration

characteristics and workload characteristics for the one or more data storage components from

the one or more source data storage systems;

simulating performance of the target data storage system using one or more workloads to

obtain utilization and performance information for each data storage system component

including optimizing the backend end of the target storage system ~~of the one or more data storage components of the one or more source data storage systems and for the target data storage system~~; and

graphically representing the utilization or performance of each of the one or more data storage components of the one or more source data storage systems merged into the target data storage system and the data storage components in the target data storage system on the user interface to enable the user to visually determine whether the target data storage system meets a desired performance.

2.   (Previously presented)   The method of claim 1, wherein the workload characteristics are obtained from a workload analyzer that analyzes the workload characteristics of the associated data storage component when executing in the source storage system in response to the one or more workloads.

3.   (Previously presented)   The method of claim 1, wherein the workload characteristics are input by the user.

4.   (Previously presented)   The method of 1 wherein the user consolidates the source data storage system by constructing the target data storage system to include fewer data storage components than the source data storage system.

5. (Previously presented) The method of claim 1 wherein the target data storage system

includes data storage components of higher capacity than the source data storage system.

6. (Previously presented) The method of claim 5, wherein the target data storage system is

configured to be load balanced in accordance with information yielded from the step of

simulating performance on the target data storage systems.

7. (Previously presented) The method of claim 1 wherein a graphical representation of the

utilization or performance on the user interface visually indicates whether to consolidate a

plurality of data storage components of the source data storage system to fewer or newer data

storage system components.

8. (Currently amended) A system for simulating and displaying performance or utilization

information of a target data storage the data storage system includes:

    a computer having a memory and a display;

    computer-executable program code, operable when executed upon by a processor of the

system to:

        display a user interface on the display, the user interface connected ~~over a~~

        ~~network~~ to the target data storage system, to the target data storage system

        comprising <u>front end controllers coupled to a cache memory and a back end</u>

        <u>coupled to the cache, the back end comprising back end controllers coupled and a</u>

        plurality of storage components, and one or more source data storage systems,

each of the one or more data storage systems comprising <u>front end controllers</u>

<u>coupled to a cache memory and a back end coupled to the cache, the back end</u>

<u>comprising back end controllers coupled and</u> one or more data storage

components;

the user interface including a selector to enable a user to select a data

storage component from the one or more source data storage systems for inclusion

in the target data storage system;

merge the one or more data storage component from the one or more data

storage systems into the target data storage system, including obtaining

configuration characteristics and workload characteristics for the one or more data

storage components from the one or more source data storage systems;

simulate performance of the target data storage system using one or more

workloads to obtain utilization and performance information for each data storage

component<u>s</u> <u>including optimizing the backend end of the target storage system</u> ~~of~~

~~the one or more data storage components of the one or more source data storage~~

~~systems and for the target data storage system~~; and

graphically represent the utilization or performance of each of the one or

more data storage components of the one ore more source data storage systems

merged into the target data storage system and the data storage components in the

target data storage system on the user interface to enable the user to visually

determine whether the target data storage system meets a desired performance.

9. (Previously presented) The system of claim 8, wherein the workload characteristics are obtained from a workload analyzer that analyzes the workload characteristics of the associated data storage component when executing in a source storage system in response to the one or more workloads.

10. (Previously presented) The system of claim 8 workload characteristics are input by the user.

11. (Previously presented) The system of claim 8, wherein the user consolidates a source data storage system by constructing the target data storage system to include fewer data storage components than the source data storage system.

12. (Previously presented) The system of claim 8, wherein the target data storage system includes data storage components of higher capacity than the source data storage system.

13. (Previously presented) The system of claim 11, wherein the target data storage system is configured to be load balanced in accordance with information yielded from the step of simulating performance on target data storage systems.

14. (Previously presented) The system of claim 12, wherein the target data storage system is configured to be optimized for performance in accordance with information yielded from the step of simulating performance on the target data storage systems.

Claims 15 - 21. (cancelled)